

CLAIMS

- 1 1. In a circuit comprising a plurality of SOI devices wherein each of the
2 plurality of SOI devices has a body, a mechanism for enhancing the
3 performance of the circuit, the mechanism comprising:
4 a circuit component for discharging accumulated electrical potential from
5 the body of the plurality of SOI devices.
- 1 2. The mechanism of claim 1 wherein the circuit component comprises a
2 pulse discharge circuit.
- 1 3. The mechanism of claim 1 wherein the circuit component comprises a
2 connection to ground for at least one of the bodies of the SOI devices.
- 1 4. The mechanism of claim 2 wherein the pulse discharge circuit comprises:
2 an input signal;
3 a delay element coupled to the input signal; and
4 an output signal coupled to the input signal, the output signal driving the
5 circuit.

1 5. The mechanism of claim 2 wherein the pulse discharge circuit further
2 comprises a pulse generator.

1 6. In a circuit comprising at least one SOI device, a method for enhancing the
2 performance of the circuit, the method comprising the steps of:
3 providing a pulse discharge circuit connected to the at least one SOI
4 device;
5 using the pulse discharge circuit to discharge any accumulated potential on
6 the at least one SOI device prior to accessing the at least one SOI device.

1 7. The method of claim 6 wherein the circuit comprises a memory circuit.

1 8. The method of claim 6 wherein the pulse discharge circuit comprises:
2 an input signal;
3 a delay element coupled to the input signal; and
4 an output signal coupled to the input signal, the output signal driving the
5 circuit.

9. In a circuit comprising a plurality of SOI devices wherein each of the plurality of SOI devices has a body, a method for enhancing the performance of the circuit, the method comprising the step of:
- 1 selecting grounding the body of at least one of the plurality of SOI devices
 - 2 to dissipate electric potential.

10. The circuit of claim 9 wherein the plurality of SOI devices comprises a memory circuit.

11. In a circuit comprising a plurality of SOI devices wherein each of the plurality of SOI devices has a body, a method for enhancing the performance of the circuit, the method comprising the step of:

providing a pulse discharge circuit, the pulse discharge circuit having a pulse generator and the pulse generator being connected to the circuit;

using the pulse generator to generate a pulse;

discharging any accumulated potential on the body of at least one of the plurality of SOI devices by supplying the pulse from the pulse generator to the body of the at least one of the plurality of the SOI devices at a pre-determined time.

1 12. The method of claim 11 wherein the plurality of SOI devices comprises a
2 memory circuit.

1 13. The method of claim 12 wherein the pre-determined time is just prior to
2 accessing the memory circuit for reading or writing data.

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